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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/099,782	03/14/2002	Ji Ming Wang	NIH173.001C1	4832
20995	7590	11/04/2003	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP			TURNER, SHARON L	
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FOURTEENTH FLOOR			PAPER NUMBER	
IRVINE, CA 92614			1647	

DATE MAILED: 11/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/099,782	Applicant(s) WANG ET AL.	
	Examiner Sharon L. Turner	Art Unit 1647	

-- Th MAILING DATE of this communication app ars on th cover sh t with the c rrespondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-28 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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Election/Restriction

1. Claims 1-28 are pending.

Improper Markush

2. Prior to setting forth the restriction requirement, it is pointed out that applicants have presented instant claims in improper Markush format, see *Ex parte Markush*, 1925 C.D. 126, *In re Weber*, 198 USPQ 334 and MPEP 803.02 and 806.04. The claims are improperly set forth as the genus claims encompass multiple products, as identified and claimed, and fail to share the characteristics of a genus, i.e., a common utility and a substantial structural feature essential to the disclosed utility. Alternatively, the claims define multiple structurally distinct compounds capable of different use, with different modes of operation, different function and different effects. A reference against one of the claimed components or methods would not be a reference against the other. Therefore, the restriction will be set forth for each of the various groups, irrespective of the improper format of the claims, because the claims define inventions that are not proper species.

3. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claim 1 drawn to an isolated complex, classified for example in class 530, subclass 350.
 - II. Claim 2 drawn to a polypeptide fragment of SAA that inhibits assembly, classified for example in class 530, subclass 300.
 - III. Claim 3 drawn to a nucleic acid encoding the polypeptide of claim 2, classified for example in class 536, subclass 23.1.
 - IV. Claim 4 drawn to a polypeptide fragment of FPRL1 that inhibits assembly, classified for example in class 530, subclass 300.

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- V. Claim 5 drawn to a nucleic acid encoding the polypeptide of claim 4 classified for example in class 536, subclass 23.1.
- VI. Claim 6 drawn to a method of inhibiting assembly of an SAA/FPRL1 complex comprising administration of the peptide of claim 2, classified for example in class 435, subclass 7.1.
- VII. Claim 6 drawn to a method of inhibiting assembly of an SAA/FPRL1 complex comprising administration of the peptide of claim 4, classified for example in class 435, subclass 7.1.
- VIII. Claim 7 drawn to a method of identifying an agent that modulates assembly of SAA/FPRL1 comprising contacting a support, classified for example in class 435, subclass 7.1.
- IX. Claim 8 in part drawn to a polypeptide fragment of SAA identified by the method of claim 7 classified for example in class 530, subclass 300..
- X. Claim 8 in part drawn to a polypeptide fragment of FPRL1 identified by the method of claim 7 classified for example in class 530, subclass 350..
- XI. Claim 9 in part drawn to a peptidomimetic that resembles the polypeptide of claim 8 to the extent of SAA, classified for example in class 530, subclass 300.
- XII. Claim 9 in part drawn to a peptidomimetic that resembles the polypeptide of claim 8 to the extent of FPRL, classified for example in class 530, subclass 300.
- XIII. Claim 10 in part, drawn to a nucleic acid encoding at least a portion of SAA identified by the method of claim 7 classified for example in class 536, subclass 23.1.
- XIV. Claim 10 in part, drawn to a nucleic acid encoding at least a portion of FPRL1 identified by the method of claim 7 classified for example in class 536, subclass 23.1..
- XV. Claim 11 in part drawn to a method of modulating a cellular response in a subject

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comprising administration of a sequence that corresponds to SAA classified for example in class 424, subclass 184.1.

- XVI. Claim 11 in part drawn to a method of modulating a cellular response in a subject comprising administration of a sequence that corresponds to FPRL1 classified for example in class 424, subclass 184.1.
- XVII. Claim 12 drawn to a method of modulating a cellular response in a subject comprising administration of an acidic amino acid replaced sequence of SAA, classified for example in class 424, subclass 184.1.
- XVIII. Claim 13 drawn to a method of modulating a cellular response in a subject comprising administration of a basic amino acid replaced sequence of SAA, classified for example in class 424, subclass 184.1.
- XIX. Claim 14 drawn to a method of modulating a cellular response in a subject comprising administration of a nonpolar amino acid replaced sequence of SAA, classified for example in class 424, subclass 184.1.
- XX. Claim 15 drawn to a method of modulating a cellular response in a subject comprising administration of an uncharged amino acid replaced with a different uncharged amino acid of SAA, classified for example in class 424, subclass 184.1.
- XXI. Claim 16 drawn to a method of modulating a cellular response in a subject comprising administration of an aromatic amino acid replaced with a different aromatic amino acid of SAA, classified for example in class 424, subclass 184.1.
- XXII. Claim 17 in part drawn to a method of modulating a cellular response in a subject comprising administration of a peptide sequence that corresponds to SAA and measuring

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the effect of the peptide agent as a ligand that interacts with a FPRL1 receptor, classified for example in class 514, subclass 2.

XXIII. Claim 17 in part drawn to a method of modulating a cellular response in a subject comprising administration of a peptide sequence that corresponds to FPRL1 and measuring the effect of the peptide agent as a ligand that interacts with a FPRL1 receptor, classified for example in class 514, subclass 2.

XXIV. Claim 18 in part drawn to a method of modulating a cellular response in a subject comprising administration of an acidic amino acid replaced sequence of SAA and measuring the effect of the peptide agent as a ligand that interacts with a FPRL1 receptor, classified for example in class 514, subclass 2.

XXV. Claim 18 in part drawn to a method of modulating a cellular response in a subject comprising administration of an acidic amino acid replaced sequence of FPRL1 and measuring the effect of the peptide agent as a ligand that interacts with a FPRL1 receptor, classified for example in class 514, subclass 2.

XXVI. Claim 19 in part drawn to a method of modulating a cellular response in a subject comprising administration of a basic amino acid replaced sequence of SAA and measuring the effect of the peptide agent as a ligand that interacts with a FPRL1 receptor, classified for example in class 514, subclass 2.

XXVII. Claim 19 in part drawn to a method of modulating a cellular response in a subject comprising administration of a basic amino acid replaced sequence of FPRL1 and measuring the effect of the peptide agent as a ligand that interacts with a FPRL1 receptor, classified for example in class 5143, subclass 2.

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- XXVIII. Claim 20 in part drawn to a method of modulating a cellular response in a subject comprising administration of a nonpolar amino acid replaced sequence of SAA and measuring the effect of the peptide agent as a ligand that interacts with a FPRL1 receptor, classified for example in class 514, subclass 2.
- XXIX. Claim 20 in part drawn to a method of modulating a cellular response in a subject comprising administration of a nonpolar amino acid replaced sequence of FPRL1 and measuring the effect of the peptide agent as a ligand that interacts with a FPRL1 receptor, classified for example in class 514, subclass 2.
- XXX. Claim 21 in part drawn to a method of modulating a cellular response in a subject comprising administration of an uncharged amino acid replaced with a different uncharged amino acid of SAA and measuring the effect of the peptide agent as a ligand that interacts with a FPRL1 receptor, classified for example in class 514, subclass 2.
- XXXI. Claim 21 in part drawn to a method of modulating a cellular response in a subject comprising administration of an uncharged amino acid replaced with a different uncharged amino acid of FPRL1 and measuring the effect of the peptide agent as a ligand that interacts with a FPRL1 receptor, classified for example in class 514, subclass 2.
- XXXII. Claim 22 in part drawn to a method of modulating a cellular response in a subject comprising administration of an aromatic amino acid replaced with a different aromatic amino acid of SAA and measuring the effect of the peptide agent as a ligand that interacts with a FPRL1 receptor, classified for example in class 514, subclass 2.
- XXXIII. Claim 22 in part drawn to a method of modulating a cellular response in a subject comprising administration of an aromatic amino acid replaced with a different aromatic

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amino acid of FPRL1 and measuring the effect of the peptide agent as a ligand that interacts with a FPRL1 receptor, classified for example in class 514, subclass 2.

XXXIV. Claim 23 in part drawn to a method of making a pharmaceutical product comprising providing a peptide product comprising a peptide having a sequence corresponding to SAA, providing a cell, contacting, identifying and incorporating, classified for example in class 435, subclass 69.1.

XXXV. Claim 23 in part drawn to a method of making a pharmaceutical product comprising providing a peptide product comprising a peptide having a sequence corresponding to FPRL1, providing a cell, contacting, identifying and incorporating, classified for example in class 435, subclass 69.1.

XXXVI. Claim 24 drawn to a method of making a pharmaceutical product comprising providing a peptide product comprising a peptide having a sequence corresponding to an acidic amino acid replaced sequence of SAA, providing a cell, contacting, identifying and incorporating, classified for example in class 435, subclass 69.1.

XXXVII. Claim 25 drawn to a method of making a pharmaceutical product comprising providing a peptide product comprising a peptide having a sequence corresponding to a basic amino acid replaced sequence of SAA, providing a cell, contacting, identifying and incorporating, classified for example in class 435, subclass 69.1.

XXXVIII. Claim 26 drawn to a method of making a pharmaceutical product comprising providing a peptide product comprising a peptide having a sequence corresponding to a nonpolar amino acid replaced sequence of SAA, providing a cell, contacting, identifying and incorporating, classified for example in class 435, subclass 69.1.

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XXXIX. Claim 27 drawn to a method of making a pharmaceutical product comprising

providing a peptide product comprising a peptide having a sequence corresponding to a uncharged amino acid replaced with a different uncharged amino acid sequence of SAA, providing a cell, contacting, identifying and incorporating, classified for example in class 435, subclass 69.1.

XL. Claim 28 drawn to a method of making a pharmaceutical product comprising providing a peptide product comprising a peptide having a sequence corresponding to an aromatic amino acid amino acid of SAA replaced with a different aromatic amino acid, providing a cell, contacting, identifying and incorporating, classified for example in class 435, subclass 69.1.

4. The inventions are distinct, each from the other because of the following reasons:

5. Inventions I-VI and IX-XIV are related as products. The products are distinct each from the other as the products are comprised of divergent structure, exhibit different effects and function; for example nucleic acids, peptides and peptide complexes.

6. Inventions VII-VIII, XV-XXXIII, and XXIV-XL are related as processes. The processes are distinct each from the other as the processes differ in reagents, steps, functions and effects.

7. Inventions I-VI, IX-XIV and VII-VIII, XV-XXXIII, XXIV-XL are related as products and processes of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the processes for using the products as claimed can be practiced with another materially different product or (2) the products as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the processes for using the different nucleic acids, peptides and complexes can be practiced with alternative nucleic acids,

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peptides and complexes and the products as claimed can be used alternatively in a method of treatment, a method of inhibiting assembly, a method of making, a method of modulating cellular response, a method of screening compounds, and a method for detecting compositions. It is further noted that the products, methods of making, and methods of using are not so linked as the products and methods are not identified as being of commensurate scope, so linked.

8. The inventions are distinct, each from the other because of the following reasons:

9. Restriction is deemed to be proper because the products indicated constitute patentably distinct inventions for the following reasons. Each of the polynucleotides, polypeptides and complexes have a unique structural feature which requires a unique search of the prior art. The inventions indicated differ in structure and function as they are composed of divergent nucleic and amino acids and are differentially able to hybridize, bind or mediate biological functions. A reference to one element would not constitute a reference to another. In addition, searching all of the molecules in a single patent application would provide an undue search burden on the examiner and the USPTO's resources because the indicated searches are not co-extensive.

10. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

11. Because these inventions are distinct for the reasons given above and the search required for any Group is not required for any other Group, restriction for examination purposes as indicated is proper.

12. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for

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examination purposes as indicated is proper.

13. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

14. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

15. Any inquiry of a general nature or relating to the status of this general application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Papers relating to this application may be submitted to Technology Center 1600, Group 1640 by facsimile transmission. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). Should applicant wish to FAX a response, the current FAX number for Group 1600 is (703) 308-4242.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharon L. Turner, Ph.D. whose telephone number is (703) 308-0056. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz, can be reached at (703) 308-4623.



Sharon L. Turner, Ph.D.

October 31, 2003